4. FICUS, Linn.

(Urostigma *and* Covellia, *Gasp.*)

Flowers unisexual, minute, enclosed in a hollow globular ovoid or pear-shaped receptacle called a *fig* or *synœcium*; the minute orifice closed by bracts turned inwards, or the first rows erect outwards. Male flowers usually near the mouth of the receptacle, very rarely in separate receptacles, and often very few. Perianth of 3 to 6 lobes or segments, imbricate in the bud, rarely reduced to a single one. Stamens 1, 2, or rarely more, opposite the perianth-segments; anthers 2-celled or the cells confluent at the apex. Female perianth usually with narrower segments than the male and sometimes very much reduced or almost none. Styles usually lateral, at least after the growth of the ovary, filiform with a terminal peltate oblique or elongated and unilateral stigma, sometimes unequally 2-branched in species not Australian. Ovule pendulous or laterally attached near the top. Fruiting receptacle usually enlarged, but remaining closed, the small seed-like nuts surrounded by the membranous or succulent persistent perianth. Embryo curved, in a fleshy albumen usually rather scanty.—Trees or shrubs with the juice usually milky. Leaves alternate or opposite, entire or lobed, penniveined and usually more or less distinctly 3-nerved at the base. Stipules usually very deciduous, convolute on the young buds. Receptacles usually in pairs, or solitary by the abortion of one of each pair, either axillary or on the old wood, and then often forming clusters or racemes on short leafless branchlets. Bracts usually 3, often small and scale-like either at the base of the receptacle or along the pedicel below it. Bracts within the receptacle subtending the flowers usually very numerous, varying with the perianth in consistence and colour, those near the orifice of the receptacle usually rather larger, without flowers, and closing the orifice, the outermost rows sometimes exserted and erect, but usually horizontal or inflexed, those subtending the flowers sometimes very minute or replaced by hairs or setæ or obsolete. Male flowers usually fewer than the females, and in the upper part of the receptacle, sometimes numerous and intermixed with the females or in separate receptacles.

A very large genus, spread over the tropical and subtropical regions of the New and the Old World, but most abundant in the Indian Archipelago. Of the thirty-four Australian species at least eight extend into the Archipelago, and most of these also into East India, and two more may possibly be varieties only of a common Asiatic species, the remaining twenty-four are all endemic as far as I have been able to ascertain; but it is possible that on the general elaboration of this difficult genus, now in the hands of M. Bureau, some further identifications of Australian and Archipelago species may be effected.

Sect. 1. **Urostigma.**—*Male perianth 3-merous, rarely 5–6-merous. Stamen 1; anther-cells distinct or confluent. Female perianth 4–6-merous. Stigma (in the Australian species) elongated, acute. Leaves alternate, entire, usually coriaceous. Receptacles usually axillary.*

* *Receptacle setose inside between the flowers. Male perianth 5–6-merous. Stamen exserted.*

Leaves ovate-cordate, densely pubescent underneath . . . . 1. *F. colossea.*

** *Receptacle bracteate inside between the flowers. Male perianth 3-merous, longer than the stamens.*

Leaves with rather distant principal primary veins and numerous transverse reticulations, with a few smaller fine primary veins between the principal ones.
  Receptacles oblong, sessile. Stipules and young shoots usually hairy . . . . . 2. *F. pilosa.*
  Receptacles globular or turbinate.
    Petioles ½ to 1 in. long.
      Receptacles sessile or on a peduncle of 1 line, not exceeding 5 lines diameter.
        Leaves obtuse or shortly and obtusely acuminate (N. coast species) . . . . . 3. *F. nesophila.*
        Leaves abruptly and shortly acuminate (Queensland species) . . . . . 4. *F. Cunninghamii.*
      Receptacles on peduncles of 2 lines, ¼ to ¾ in. diameter . 5. *F. Henneana.*
    Petioles under ¼ in. long. Peduncles very short . . . . 6. *F. validinervis.*

(*F. macrophylla* and occasionally some other species of the following group, approach those of the present group in venation.)

Leaves with numerous parallel primary transverse veins all equal or every third or fourth more prominent.
  Leaves thinly coriaceous, mostly under 3 in.
    Receptacles sessile or on very short peduncles.
      Petioles under 3 lines. Leaves usually broad and very obtuse. Receptacles ½ in. diameter . . . . . 7. *F. retusa.*

Petioles ¼ to ½ in. Leaves oblong-lanceolate or elliptical, scarcely acuminate. Receptacles ¼ in. diameter . . 8. *F. eugenioides.*
Petioles ¼ to ½ in. Leaves ovate or broadly elliptical, acuminate. Receptacle under ½ in diameter . . . 9. *F. benjaminea.*
Receptacles pedunculate, ½ in. diameter. Leaves of *F. benjaminea* . . . . . 10. *F. Muelleri.*
Leaves more coriaceous, obtuse or shortly and obtusely acuminate, rarely under 3 in. long.
Receptacles pedunculate.
Leaves softly pubescent underneath. Receptacles villous, scarcely umbonate . . . . . 11. *F. leucotricha.*
Leaves glabrous. Receptacles glabrous, prominently umbonate . . . . . 13. *F. puberula.*
Receptacles sessile or on very short thick peduncles.
Leaves mostly 3 to 4 in. long.
Leaves ferruginous underneath when young . . . 12. *F. rubiginosa.*
Leaves glabrous or minutely pubescent and pale . . 14. *F. platypoda.*
Leaves glabrous, with very short petioles and very prominent veins (doubtful species) . . . . . 15. *F. dictyophleba.*
Leaves mostly 6 to 10 in. long, glabrous . . . . . 16. *F. macrophylla.*

Sect. 2. **Eusyce.**—*Male perianth of 5 or 6 lobes or segments, rarely reduced to 1. Stamens 1, 2 or more; anther-cells distinct. Female perianth 4–6-merous. Stigma (in the Australian species) undivided, peltate, oblique or oblong. Leaves alternate or opposite, entire, toothed or lobed, often deciduous. Receptacles axillary or on the old wood.*

Leaves smooth, at least on the upper side, or scarcely scabrous.
Leaves large (½ to 1½ ft.), glabrous. Stigma not peltate.
Leaves obovate-oblong or elliptical. Stipules narrow, rigid. Stigma obtuse, scarcely thickened. . . . . 17. *F. magnifolia.*
Leaves cordate-ovate. Stipules membranous. Stigma oblong, thick . . . . . 18. *F. ehretioides.*
Leaves under 6 in. long.
Stipules and young shoots silky-hairy or hoary. Stigma oblique, lanceolate.
Creeping or climbing shrub. Leaves mostly cordate-ovate, strongly reticulate underneath . . . . . 19. *F. pumila.*
Small tree with pendulous branches. Leaves long, lanceolate, acuminate . . . . . 20. *F. coronulata.*
Quite glabrous. Leaves elliptical or oblong-ovate.
Petioles slender, 2 to 3 lines long. Leaves prominently reticulate underneath. Stigma oblique . . . . . 21. *F. leptoclada.*
Petioles ½ in. long. Leaves with scarcely conspicuous veinlets. Style short. Stigma peltate . . . . . 22. *F. depressa.*
Petioles thick, under 3 lines. Stigma peltate. Male perianth of 1 narrow segment . . . . . 23. *F. philippinensis.*
Underside of the leaves and receptacles softly villous. Stigma peltate. . . . . 24. *F. mollior.*
Leaves very scabrous.
Receptacles unisexual, the males oblong-cylindrical, the females ovoid or globose. Leaves opposite or alternate . . 25. *F. stenocarpa.*
Receptacles androgynous, ovoid or globose.
Leaves all alternate, pubescent or villous underneath. Receptacles villous, the orifice broad with exserted bracts . . 26. *F. aspera.*
Leaves frequently opposite. Receptacles globular, glabrous or rarely pubescent.
Leaves mostly glaucous, rigid, ovate or orbicular, the margins aculeate.
Branches glabrous . . . . . 27. *F. orbicularis.*
Branches hirsute or pubescent . . . . . 28. *F. aculeata.*
Leaves entire or sinuate-crenulate, not aculeate.
Leaves of the flowering branches ovate, 2 to 8 in. long, petioles ½ to 1 in. . . . . 29. *F. opposita.*
Leaves of the flowering branches obovate, 2 to 3 in. long, petioles very short . . . . . 30. *F. scobina.*

Sect. 3. **Covellia.**—*Male perianth of 3 or 4 broad segments enveloping each other, enclosing 1 large anther with distinct cells. Female perianth very small or more rarely exceeding the stipes of the ovary. Style glabrous, short, with a peltate or oblique stigma. Leaves usually large. Stipular scar prominent. Receptacles chiefly on the old wood.*

Leaves all opposite. Receptacles ¾ to 1 in. diameter, not ribbed . . . . . 31. *F. hispida.*
Leaves all or mostly alternate. Receptacles about ¼ in. diameter, 6-ribbed.
Leaves scabrous, 4 to 10 in. long. Young shoots pubescent or hispid . . . . . 32. *F. fasciculata.*
Leaves 3 to 4 in., glabrous and smooth as well as the branches 33. *F. casearia.*
Leaves all alternate, glabrous and smooth. Receptacles 1 to 1½ in. diameter, not ribbed. Stigma oblique . . . . . 34. *F. glomerata.*

Miquel, in the Journ. Bot. Neerl. 1861, 234, mentions his *U. stipulosum*, Miq., as from Hastings river, *Beckler*. I can find nothing in Beckler's collections which I am able to refer to the Philippine island plant originally described as *U. stipulosum*, and entered as *Ficus stipulosa* in the Ann. Mus. Lugd. Bat. iii. 287. Miquel has also in the Journ. Bot. Neerl. 1861, 240, described an *Urostigma? subglaucinum* from Rockhampton, of which he had seen leaves only, and doubts its belonging to the genus. It is therefore omitted from the enumeration in the Ann. Mus. Lugd. Bat. There is, however, a *Ficus Fitzalani*, Miq. in Journ. Bot. Neerl. 1861, 242, from Cape Cleveland, *Fitzalan*, which he has included in the Annales although described also from leaves only. I find nothing amongst Fitzalan's plants in F Mueller's collection answering to the description nearer than some of the forms of *F. platypoda*, but they have more numerous veins than are mentioned by Miquel, and no *Ficus* can be satisfactorily identified without the fructification.

Ficus

20. **F. coronulata,** *F. Muell.; Miq. in Journ. Bot. Neerl.* 1861, 242. A small tree with pendulous branches, the young shoots slightly hoary pubescent, otherwise glabrous. Leaves alternate, lanceolate, acuminate, entire, contracted towards the base, 4 to 6 in. long, ½ to 1 in. broad, membranous, not scabrous, with rather numerous transverse primary veins, but without any oblique basal pair, the petiole rather broad, 3 to 4 lines long. Receptacles in the specimens seen solitary at the lower nodes below the leaves, on pedicels of ¼ to ½ in., ovoid, contracted into a short neck formed as in *F. aspera* by the erect bracts of the broad orifice, becoming at length nearly globular and nearly ½ in. diameter. Bracts within the receptacle and perianths white-hyaline. Male flowers not seen. Style glabrous, with a terminal oblique slightly dilated stigma.—*F. salicina,* F. Muell. Fragm. iv. 49.

N. Australia. Victoria and Fitzmaurice rivers, *F. Mueller.*

NIB

MORACEAE

Ficus glabella

Blume

34. **F. glomerata,** *Willd. Spec. Pl.* iv. 1148. A large tree, glabrous or the young shoots slightly pubescent. Leaves alternate, on petioles of 1 to 2 in., from ovate or ovate-lanceolate to oblong-elliptical, shortly acuminate, entire, rounded at the base, 3 to 5 in. long, 1 to 2½ in. broad, rigidly membranous, the primary veins distant and prominent underneath, the lowest pair rather more oblique, but starting from above the base, the transverse reticulations very fine and often inconspicuous. Stipules lanceolate, often ½ in. long, membranous, crowded on the young shoots, and often persistent even when the leaves are full grown. Receptacles "in thick bunches or spikes on the principal stems all over the tree," globular or somewhat turbinate, 1 to 1½ in. diameter, slightly mealy or downy when young, "crimson when ripe and edible." Subtending bracts small. Male perianths of broadly orbicular hyaline segments closely enveloping each other, and enclosing 1 or 2 equal or unequal stamens, the anther-cells distinct and parallel. Female perianth very short, but more developed than in the last two species. Style glabrous, with an oblique terminal stigma, sometimes very short, but varying to lanceolate.—Roxb. Corom. Pl. ii. t. 123; Wight Ic. t. 667; *Covellia glomerata*, Miq. in Hook. Lond. Journ. vii. 465; *Ficus vesca*, F. Muell.; Miq. in Journ. Bot. Neerl. 1861, 243.

N. Australia. Fitzmaurice river, *F. Mueller.*

Queensland. Northumberland islands, *R. Brown;* Port Denison, *Fitzalan;* Rockingham Bay, *Dallachy;* Rockhampton, *Bowman, Thozet, Dallachy.*

The species is common in moist rich soil in East India, and extends probably over the Indian Archipelago under some other name, if I am really correct in referring the Australian plant to the Indian species. I have not succeeded in detecting any tangible difference.

31. **F. hispida,** *Linn. f. Suppl.* 442. A small tree, remarkable for the young branches, when luxuriant, very hollow and contracted at the nodes, the foliage and branches more or less sprinkled or covered with short stiff hairs. Leaves all opposite, broadly oblong-elliptical or almost ovate, usually acuminate, rounded or cordate at the base, mostly 6 to 10 in. long and 4 to 5 broad, but very variable in size and shape, entire or sinuate-toothed, the indumentum scabrous above, soft underneath, the primary veins distant, prominent underneath as well as the transverse veinlets, the basal pair very oblique. Receptacles either in pairs in the lower axils or more frequently in leafless clusters or racemes on the older wood, globose or somewhat turbinate, $\frac{3}{4}$ to 1 in. diameter, "white," more or less hirsute. Male flowers amongst the larger bracts near the orifice, the segments brown-hyaline, very broad, each one completely enveloping the next in the bud. Female perianth at length nearly as long as the ovary, with very obtuse or truncate lobes, but so thin and closely appressed as to be easily overlooked. Ovary stipitate. Style with a few hairs; stigma peltate.—*F. oppositifolia*, Willd. Spec. Pl. iv. 1151; Roxb. Corom. Pl. t. 124; Wight Ic. t. 638; *Covellia oppositifolia*, Gasp., and many other synonyms quoted by Miq. in Ann. Mus. Lugd. Bat. iii. 296.

N. Australia. Brunswick Bay, N.W. coast, *A. Cunningham.*
Queensland. Northumberland islands and Broad Sound, *R. Brown* (without figs, but apparently this species); Rockingham and Edgecombe bays, *Dallachy.*

11. **F. leucotricha,** *Miq. in Ann. Mus. Lugd. Bat.* iii. 285. A small tree, the flowering branches and petioles hirsute with spreading white hairs. Leaves shortly petiolate, ovate broadly oblong or elliptical, obtuse or very obtusely and obscurely acuminate, rounded or scarcely cordate at the base, entire, 3 to 5 in. long, 1½ to 2½ broad, rigidly coriaceous, pubescent, but the down almost disappearing on the upper side, remaining soft and dense underneath, the primary veins rather numerous, fine, and almost transverse. Stipules long and narrow. Receptacles axillary, usually in pairs, on peduncles of 2 to 4 lines, globular, somewhat rugose, very villous, attaining ½ in. diameter, the subtending bracts ovate, about ½ in. long, but already fallen away from almost all the specimens seen. Male flowers intermixed with the females towards the orifice; perianth stipitate 3-merous, with one large anther with parallel cells. Female flowers nearly sessile; perianth 4-merous. Stigma linear and acute, but rather short. Bracts and perianths as in most species of the section dark brown when dry.—*Urostigma leucotrichum*, Miq. in Journ. Bot. Neerl. 1861, 234; *Ficus lanata*, F. Muell. Herb.

N. Australia. Islands of the Gulf of Carpentaria, *R. Brown;* Sea Range, *F. Mueller.*

F. Mueller distinguished two varieties, *microcarpa*, in which the receptacles are about 4 lines, and *macrocarpa*, in which they are fully 6 lines diameter; but on examination the former appear to be not yet full grown, with the flowers in bud or only just expanded, leaving a central cavity; whilst in the larger form the fruits are ripe, completely filling the receptacle. The bracts subtending the receptacle appear to be larger in this than in any other Australian species.

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N. Australia. Islands of the Gulf of Carpentaria, *R. Brown;* Sea Range, *F. Mueller.*

F. Mueller distinguished two varieties, *microcarpa,* in which the receptacles are about 4 lines, and *macrocarpa,* in which they are fully 6 lines diameter; but on examination the former appear to be not yet full grown, with the flowers in bud or only just expanded, leaving a central cavity; whilst in the larger form the fruits are ripe, completely filling the receptacle. The bracts subtending the receptacle appear to be larger in this than in any other Australian species.

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NCB

MORACEAE

Ficus obliqua
Forst.

29. **F. opposita,** *Miq. in Hook. Lond. Journ.* vii. 426. A tall shrub or small tree, the young branches and underside of the leaves softly and densely pubescent. Leaves mostly opposite, exceedingly variable in size and shape, in the typical specimens broadly cordate-ovate and about 2 in. long on petioles not exceeding ½ in., in others ovate, ovate-oblong, or ovate-lanceolate, 6 to 8 in. long, on petioles of ½ to 1 in., all obtuse or acuminate, entire or very slightly undulate-crenulate, very scabrous above, distantly penniveined with the lowest pair starting from very near the base, the transverse veinlets and reticulations prominent underneath; on some barren branches the leaves are hastately 3-lobed with 1 long lanceolate central and 2 short lateral lobes. Stipules about 2 lines long. Receptacles axillary, solitary or in pairs, at first somewhat pear-shaped, at length nearly globular and about ½ in. diameter. Peduncles varying from 1 to 3 lines, the scale-like bracts usually at some distance from the fig, but sometimes close to it. Flowers entirely those of *F. orbiculata*.—*F. indecora*, Miq. in Journ. Bot. Neerl. 1861, 242, as to the specimens from Clarence river.

Queensland. Keppel and Shoalwater bays and Broad Sound, *R. Brown;* Bremer river, *Fraser;* Rodd's bay, *A. Cunningham;* estuary of the Burdekin, *F. Mueller;* Port Denison, *Fitzalan;* Rockingham bay, *Dallachy;* Rockhampton, *Bowman.*

N. S. Wales. New England, *C. Stuart;* Clarence river, *Beckler.*

29. **F. opposita,** *Miq. in Hook. Lond. Journ.* vii. 426. A tall shrub or small tree, the young branches and underside of the leaves softly and densely pubescent. Leaves mostly opposite, exceedingly variable in size and shape, in the typical specimens broadly cordate-ovate and about 2 in. long on petioles not exceeding ½ in., in others ovate, ovate-oblong, or ovate-lanceolate, 6 to 8 in. long, on petioles of ½ to 1 in., all obtuse or acuminate, entire or very slightly undulate-crenulate, very scabrous above, distantly penniveined with the lowest pair starting from very near the base, the transverse veinlets and reticulations prominent underneath; on some barren branches the leaves are hastately 3-lobed with 1 long lanceolate central and 2 short lateral lobes. Stipules about 2 lines long. Receptacles axillary, solitary or in pairs, at first somewhat pear-shaped, at length nearly globular and about ½ in. diameter. Peduncles varying from 1 to 3 lines, the scale-like bracts usually at some distance from the fig, but sometimes close to it. Flowers entirely those of *F. orbiculata*.—*F. indecora*, Miq. in Journ. Bot. Neerl. 1861, 242, as to the specimens from Clarence river.

Queensland. Keppel and Shoalwater bays and Broad Sound, *R. Brown;* Bremer river, *Fraser;* Rodd's bay, *A. Cunningham;* estuary of the Burdekin, *F. Mueller;* Port Denison, *Fitzalan;* Rockingham bay, *Dallachy;* Rockhampton, *Bowman.*

N. S. Wales. New England, *C. Stuart;* Clarence river, *Beckler.*

27. **F. orbicularis,** *A. Cunn.; Miq. in Hook. Lond. Journ.* vii. 426. A shrub usually of 4 or 5 ft., growing into a small tree of about 10 ft., glabrous or sparingly pubescent on the young shoots. Leaves alternate or rarely opposite, on petioles of 1 to 3 lines, very broadly ovate or orbicular, obtuse, more or less bordered by minute rigid teeth or callosities, mostly 1½ to 2 in. long and 1 to 1½ broad, but larger on luxuriant barren shoots, rigid and very scabrous above, nearly smooth underneath, with few distant primary veins, and 3-nerved from the prominence of the basal pair, the reticulate veinlets fine and little conspicuous. Stipules small and narrow. Receptacles axillary, on pedicels very short or nearly as long as the petioles, solitary or rarely in pairs, globular, 3 to 4 lines diameter, usually scabrous and sometimes sparingly pubescent. Subtending bracts small and scale-like, 1 or 2 usually on the pedicel below the receptacle. Inner bracts and perianths white-hyaline. Perianth-segments usually 5, narrow, three inner ones especially in the females much longer than the others. Male flowers few and only 1 stamen with a large oblong anther in those I examined. Style short, glabrous, with a terminal peltate stigma.—*F. indecora*, Miq. in Hook. Lond. Journ. vii. 426 (with leaves not quite so broad), and *F. Beckleri*, Miq. in Journ. Bot. Neerl. 1861, 241 (as to the N.-Western species).

N. Australia. Careening bay, Enderby island and Dampier's Archipelago, N.W. Coast, *A. Cunningham;* King's Sound, *Hughan;* Nichol bay, *Gregory's Expedition;* Victoria and Fitzmaurice rivers, *F. Mueller;* Port Darwin, *Schultz, n.* 407.

14. **F. platypoda,** *A. Cunn.; Miq. in Ann. Mus. Lugd. Bat.* iii. 287. A small tree of robust growth, perfectly glabrous in all its parts in the typical form, more or less pubescent in several varieties, but not ferruginous. Leaves in the typical form on broad petioles of about ½ in., ovate, obtuse, entire, rounded or slightly cuneate at the base, or the lower ones almost cordate, 2½ to 4 in. long, and 2 to 2½ broad, thickly coriaceous with numerous transverse parallel primary veins, the principal ones not distant, and the basal pair not very conspicuous. Receptacles axillary, mostly in pairs, sessile or on peduncles not exceeding 1 line, globular, not warted, without any umbonate prominence, 4 to 5 lines diameter. Male flowers few, intermixed with the females towards the orifice. Perianths all stipitate. Anther-cells contiguous at the apex, but scarcely confluent in the flower examined. Stigma linear-subulate and acute, or sometimes in the same receptacle shorter and more obtuse.—*Urostigma platypodum,* Miq. in Hook. Lond. Journ. vi. 561.

N. Australia. York Sound and Vansittart's Bay, *A. Cunningham.*

The following forms may some of them, when better known, prove to be sufficiently distinct to be received as species :—

Var. *lachnocaulon.* Closely resembling the typical form except that the ends of the branches and petioles are pubescent, and the under surface of the leaves also slightly so; the petioles particularly short.—*Urostigma lachnocaulon,* Miq. in Journ. Bot. Neerl. 1861, 238. *Ficus lachnocaula,* Miq. in Ann. Mus. Lugd. Bat. iii. 287.—Australia, *Baudin's Expedition,* probably from the N.W. Coast; Port Darwin, *Schultz, n.* 411.

Var. ? *minor,* Miq. Glabrous. Leaves elliptical-oblong, 2 to 3 in. long and 1 to 1½ in. broad, the petioles rather longer than in the typical form and the receptacles on very short peduncles.

N. Australia. N.W. Coast, *Bynoe;* Nicol Bay, *Gregory's* and *Ridley's Expeditions.*

Var. ? *petiolaris.* Glabrous. Leaves usually larger than in the typical form, on petioles of 1½ to 2½ in. Stipules very long. Receptacles rather small, on short peduncles.

NIB

MORACEAE

Ficus podocarpifolia
corner.

13. **F. puberula,** *A. Cunn.; Miq. in Ann. Mus. Lugd. Bat.* iii. 287. A tree with the habit of *F. platypoda*, and apparently almost as variable in the leaves, rather large and broad or smaller and narrower, always obtuse or shortly and obtusely acuminate, coriaceous, glabrous or very slightly pubescent, and not ferruginous, with the venation of *F. platypoda*, the young shoots and stipules most frequently pubescent. Receptacles globular and smooth, about 4 to 5 lines diameter, like those of *F. platypoda* but on peduncles of 3 to 4 lines, and usually distinctly umbonate.—*Urostigma puberulum*, Miq. in Hook. Lond. Journ. vi. 562, t. 23; *U. vitellinum*, Miq. in Journ. Bot. Neerl. 1861, 237; *Ficus vitellina*, Miq. in Ann. Mus. Lugd. Bat. iii. 288.

N. Australia. York Sound, N.W. coast, *A. Cunningham;* Port Walcot, *C. Harper;* Fitzmaurice river, *F. Mueller.*

SEB

MORACEAE

Ficus racemosa L.

30. **F. scobina,** *Benth.* A shrub or small tree of 8 to 20 ft., remarkable for the extreme asperity of both sides of the leaves as well as of the petioles and young branches, otherwise glabrous. Leaves alternate or rarely opposite, on very short petioles, mostly obovate or obovate-oblong, and very obtuse or shortly acuminate, rounded or contracted at the base, and 2 to 3 in. long, and $\frac{3}{4}$ to $1\frac{1}{2}$ in. broad, but passing into oblong-elliptical, and on luxuriant barren branches sometimes oblanceolate, 4 to 5 in. long, and $\frac{1}{2}$ to $\frac{3}{4}$ in. broad, often slightly and irregularly sinuate-toothed at the end, the distant primary veins and transverse reticulate veinlets prominent underneath, without any distinct basal pair of veins. Receptacles mostly solitary, globose, the largest on our specimens 4 lines diameter, scabrous like the rest of the plant, but without hairs, the external bracts small and scale-like, either close under the receptacle or along the short peduncle. Male flowers few near the orifice. Perianth-segments of both sexes narrow and unequal, and as well as the bracts white-hyaline as in *F. orbiculata.* Stamens 1 with a large 2-celled anther, and sometimes a second smaller one. Style glabrous, with a terminal truncate or peltate stigma.

N. Australia. Lizard island, *A. Cunningham;* Port Essington, *Leichhardt;* Port Darwin, *Schultz, n.* 6, 410, 499.—Although allied in some respects to the three preceding species, this differs so much in aspect, in the shape of the leaves and in their short petioles, that it can scarcely be considered as a variety only, nor can I identify it with any of the Indian scabrous species to which it bears some resemblance.

NIB

MORACEAE

Ficus subpuberula

NIB

MORACEAE

Ficus tinctoria Forst. f.
ssp. tinctoria

NIB

MORACEAE

Ficus virens

NIB

MORACEAE

Ficus virens var.
sublanceolata

7. **MALAISIA**, Blanco.

(Cephalotropis, *Blume;* Dumartroya, *Gaudich.*)

Flowers dicœcious, the males in oblong or cylindrical spikes, the females in globular heads on a small receptacle. Male perianth deeply divided into 3 or 4 lobes or segments, valvate in the bud. Stamens 3 or 4, the filaments elongated, inflected in the bud. Female perianth urceolate, with a small orifice, enclosing the ovary. Style with 2 elongated stigmatic branches. Ovule pendulous. Fruiting-head not much enlarged, the nuts enclosed in the slightly succulent perianths. Seed with a thin testa and very scanty albumen. Cotyledons very unequal, curved over the ascending radicle, the larger one embracing the smaller one in its concave surface.—A straggling tree or woody climber, with a milky juice. Leaves alternate, usually entire. Stipules small, deciduous. Inflorescence axillary.

The genus appears to be limited to the single Australian species, extending over the Indian Archipelago and islands of the South Pacific to the Philippines.

Malaisia

1. **M. tortuosa,** *Blanco, Fl. Filip.* 789. A small straggling tree with its upper branches twining according to some collectors, or a tall climbing shrub, glabrous or the young shoots and inflorescences slightly pubescent. Leaves shortly petiolate, oblong-elliptical or almost ovate, very obtuse or acuminate, coriaceous, prominently penniveined, 1½ to 3 in. long. Male spikes solitary or 2 together, sessile or shortly pedunculate, dense, often curved, 2 to 6 lines long. Female heads 1½ to 2 lines diameter or rather larger when in fruit, tomentose, solitary on short peduncles or forming little axillary racemes (short leafless flowering branches) always much shorter than the leaves. Bracts numerous, concave, the prominent dorsal pubescent gibbosities densely imbricate. Flowers mostly rudimentary, only 2 or 3 in the head perfect, concealed under the bracts except the long filiform exserted style-branches.—Bureau in Ann. Sc. Nat. ser. 5, xi. 369, with the following Australian besides several other synonyms; *M. Cunninghamii*, Planch. in Ann. Sc. Nat. ser. 4, iii. 293, F. Muell. Fragm. vi. 193; *M. scandens*, *M. viridescens* and *M. acuminata*, Planch. l.c. 293, 294; *Dumartroya fagifolia*, Gaudich. in Voy. Bonite, t. 97; *Cephalotropis javanica*, Blume, Mus. Bot ii. 76.

N. Australia. Port Darwin, *Schultz, n.* 396, 745.

Queensland. Brisbane river, Moreton Bay, *A. Cunningham, F. Mueller,* and others; thence to Rockhampton, Rockingham and Edgecombe Bays, and the Burdekin, *F. Mueller, Thozet, Dallachy, Fitzalan,* and others; Wide Bay, *Bidwill.*

N. S. Wales. Camden Harbour, *C. Moore;* Richmond river, *Henderson;* Illawarra, *Backhouse;* "Crow-ash" of the Colonists, *F. Mueller;* Clarence river, *Beckler* (with acuminate leaves sometimes toothed near the apex and 3 to 4 in. long); Lord Howe's Island, *C. Moore* (with large ovate acuminate or ovate-lanceolate leaves and remarkably large male spikes, the females not seen).